

Warm Up: 9/11/12

The first stage of a rocket burns 28 seconds longer than the second stage. If the total burning time for both stages is 152 seconds, how long does each stage burn?

$$\begin{array}{rcl} \text{Stage 1} & & \text{Stage 2} \\ \hline x + 28 & & x \\ x + x + 28 = 152 & & \\ 2x + 28 = 152 & & \\ \quad -28 \quad -28 & & \\ \hline 2x = 124 & & \\ x = 62 & & \end{array}$$

$$\begin{array}{r} \text{Stage 1} \\ \hline 90 \end{array}$$

$$\begin{array}{r} \text{Stage 2} \\ \hline 62 \end{array}$$

#8)

$$3(x+1) = 2(x+11)$$

$$\begin{array}{r} 3x + 3 = 2x + 22 \\ - 2x \quad - 2x \end{array}$$

$$\begin{array}{r} x + 3 = 22 \\ - 3 \quad - 3 \end{array}$$

$$\underline{x = 19}$$

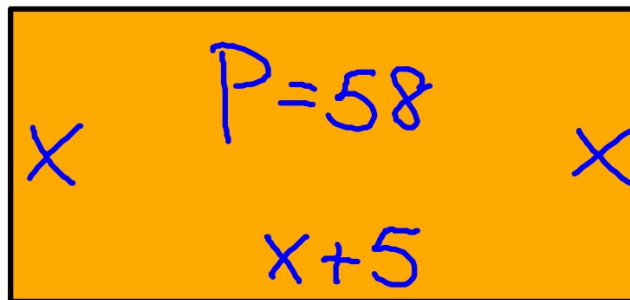
$$\#5) \quad 9(z-3) = 12z$$

$$\begin{array}{r} 9z - 27 = 12z \\ -9z \qquad -9z \\ \hline -27 = 3z \\ \frac{-27}{3} = \frac{3z}{3} \\ -9 = z \end{array}$$

#30

WIDTH = 12 cm
LENGTH = 17 cm
 $x+5$

w



$$x + x + x + 5 + x + 5 = 58$$
$$4x + 10 = 58$$
$$4x = 48$$
$$x = 12$$

$$\begin{array}{r} \#31 \end{array} \left| \begin{array}{r} \#1 \\ \hline x \end{array} \quad \begin{array}{r} \#2 \\ \hline x+2 \end{array} \quad \begin{array}{r} \#3 \\ \hline x+4 \end{array} \quad \begin{array}{r} \#4 \\ \hline x+6 \end{array} \right.$$

$$x + x + 2 + x + 4 + x + 6 = 336$$

$$4x + 12 = 336$$

$$4x = 324$$

$$x = 81$$

$$\#1 = 81$$

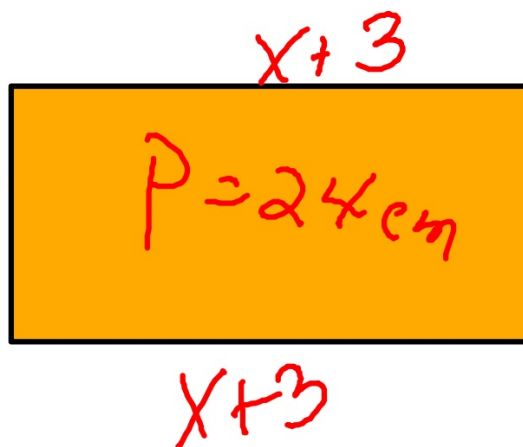
$$\#2 = 83$$

$$\#3 = 85$$

$$\#4 = 87$$

The length of a rectangle is 3 cm greater than the width. The perimeter is 24 cm. Find the dimensions.

$$\begin{array}{r} 4x + 6 = 24 \\ -6 \quad -6 \\ \hline 4x = 18 \\ x = 4.5 \end{array}$$



$$\begin{array}{l} W = 4.5 \\ \text{cm} \\ x \quad L = 7.5 \\ \text{cm} \end{array}$$

Front # 26, 9, 10, 11

Back # 1-5

FINISH FOR
HOMEWORK!

